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INQUIRE=DOC12D  
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RGTMYUW YEKAKHA0388 2721218-MORN--YEKDQX.  
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FM CIA/OSWR  
TO DIRNSA  
SSO DIA//PASS TO OSD/C3I/DUANE ANDREWS  
SSO FTD  
SSO AFLC//IN  
SSO DIA//PASS TO USD/DR BETTI  
SSO DIA//PASS TO SSO SDIO DR WARD  
NPIC  
SSO REDSTONE//AIAMS-DL  
YEKADSC/NSC  
SSO CHVILLE  
NWS  
DOEHQ  
NTIC  
STATE RCI//KEEP AND PASS ACDA  
SSO USAF  
SSO SVALE//PASS TO GROUP A  
CIA//PASS TO OIR  
ZEM  
CONTROLS

QQQQ

SECTION 1 OF 4  
CITE CIA/OSWR

/\*\*\*\*\* THIS IS A COMBINED MESSAGE \*\*\*\*\*/

BODY

SUBJECT: SCIENCE AND WEAPONS REVIEW CABLE,  
SW SWRC 28 SEPTEMBER 1990

X-----  
IRAQ: THE LASER HAZARD TO US FORCES IN THE PERSIAN  
GULF

RANGEFINDERS ON IRAQI TANKS POSE THE PRIMARY  
LASER EYE HAZARD TO US FORCES IN THE GULF; AIRBORNE  
LASER TARGET DESIGNATORS MAY ALSO BE A THREAT. FROM  
EVIDENCE PRESENTLY AVAILABLE, WE JUDGE IT UNLIKELY  
THAT IRAQ HAS FIELDIED A DEDICATED LASER BLINDING

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WEAPON.

[REDACTED]

X-----

1. IRAQ: THE LASER HAZARD TO US FORCES IN THE PERSIAN GULF [REDACTED]:

THE IRAQIS HAVE FIELDIED TANKS THAT INCORPORATE LASER RANGEFINDERS (LRFS). [REDACTED]

SEVERAL MODELS OF IRAQI AIRCRAFT INCORPORATE LASER TARGET DESIGNATORS (LTDS). [REDACTED]

HAVE A GROUND-BASED LTD. [REDACTED]

THE IRAQIS ARE NOT KNOWN TO [REDACTED]

COMMENT:

WE ASSESS THAT:

X -- THE PRIMARY EYE HAZARD FROM IRAQI FORCES EXISTS FROM THEIR TANK LRFS; AIRBORNE LTDS MAY ALSO POSE A THREAT. IN THE EVENT OF HOSTILITIES, US GROUND FORCES WILL BE THE MOST VULNERABLE. AIRCREWS OF HELICOPTERS ALSO MAY BE VULNERABLE IF IRAQI TANK CREWS USE LRFS TO ENGAGE THE HELICOPTERS WITH THEIR MAIN GUN, AS MANY ARMIES TRAIN TO DO. IT IS UNLIKELY THAT US SAILORS OR AIRCREWS OF HIGH-PERFORMANCE AIRCRAFT WILL BE EXPOSED TO HAZARDOUS LEVELS OF LASER RADIATION FROM IRAQI LRFS OR LTDS.

X -- IT IS UNLIKELY THAT THE IRAQIS HAVE ACQUIRED OR DEVELOPED A DEDICATED LASER BLINDING WEAPON. [REDACTED]

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THE EYE HAZARD FROM IRAQI LRFS

IRAQI TANK LRFS MAY PRESENT AN EYE HAZARD TO UNPROTECTED US SOLDIERS, ESPECIALLY IF THEY ARE LOOKING THROUGH A MAGNIFYING OPTIC SUCH AS M-19 7-POWER BINOCULARS. SINCE MOST IRAQI GROUND-BASED LRFS ARE INCORPORATED INTO TANKS, THE MOST LIKELY TARGETS TO BE IRRADIATED IN BATTLE WILL BE US ARMOR AND INFANTRY. IT IS UNLIKELY THAT FIXED-WING, HIGH-PERFORMANCE US AIRCRAFT WILL BE IRRADIATED BY THESE TANK LRFS.

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THE EYE HAZARD FROM IRAQI LTDS-1-

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1 [REDACTED]  
[REDACTED]  
BECAUSE OF THE EMPLOYMENT DOCTRINE WE WOULD EXPECT FOR THE LTDS IN THE IRAQI INVENTORY, WE ASSESS THAT THEY PROBABLY WILL NOT PRESENT A SIGNIFICANT EYE HAZARD TO US FORCES:  
X-1- THE EYE HAZARDS DESCRIBED IN THIS ARTICLE ARE BASED ON EXPOSURE TO A SINGLE LASER PULSE.  
[REDACTED]

X -- MANY OF THE TARGETS FOR IRAQI LASER-GUIDED MUNITIONS (LGMS) WILL BE OF HIGH VALUE AND LARGE--SUCH AS BRIDGES OR

/\*\*\*\*\* BEGINNING OF SECTION 003 \*\*\*\*\*/  
SURFACE SHIPS--SO THAT THE LIKELIHOOD OF IRRADIATING A PERSON IS LOW.

X -- THE LTDS WILL BE AIMED AT GROUND OR SEA TARGETS ONLY. THUS, US AIRCREWS SHOULD NOT BE AT RISK.

X -- IN THE IRAN-IRAQ WAR THE IRAQIS EMPHASIZED AIRCRAFT SURVIVABILITY IN COMBAT MISSIONS. THEY PROBABLY WILL FOLLOW THE SAME DOCTRINE AGAINST US FORCES AND THUS WILL ATTEMPT TO MAXIMIZE THEIR STANDOFF RANGE (10 TO 15-KM) WHEN DELIVERING LGMS. THUS, WE BELIEVE IT IS UNLIKELY THAT US FORCES AT OR NEAR THE DESIGNATED TARGETS WILL BE EXPOSED TO A HAZARDOUS LEVEL OF LASER RADIATION.  
[REDACTED]

#### THE EYE THREAT FROM IRAQI LASER WEAPONS

WE REMAIN UNCONVINCED THAT THE IRAQIS HAVE FIELDED A DEDICATED LASER WEAPON, DESIGNED SPECIFICALLY TO BLIND ENEMY SOLDIERS.  
[REDACTED]  
[REDACTED]

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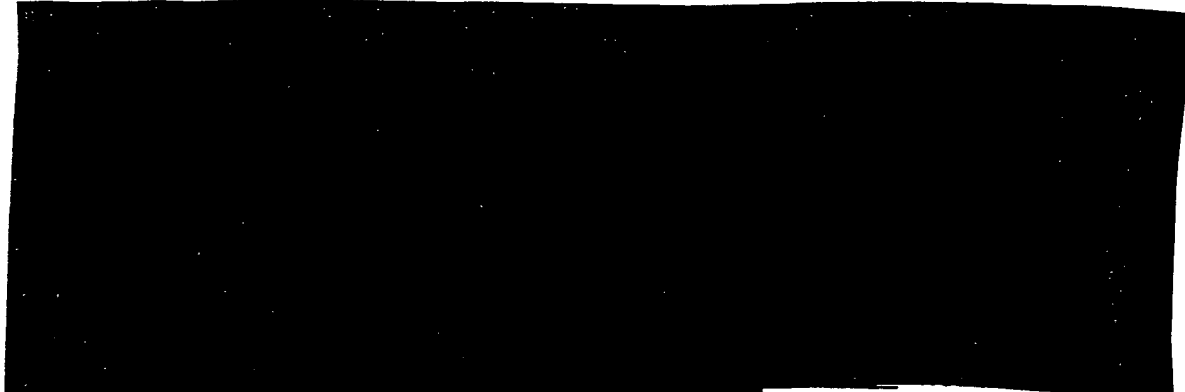
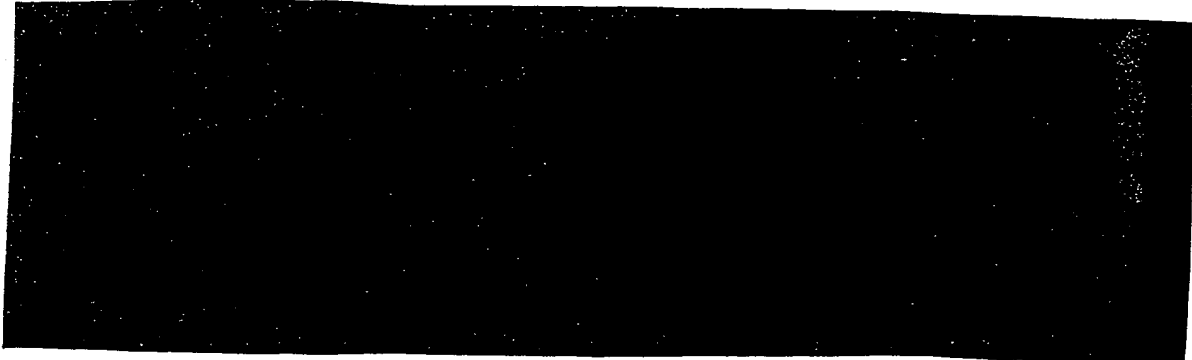
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THE LASERS KNOWN TO BE AVAILABLE TO OR OBTAINED BY THE IRAQIS  
IN THE 1980S WERE EITHER LOW-ENERGY MILITARY LRFS



AND WE ARE  
SOMEWHAT SKEPTICAL THAT A SCIENTIFIC/COMMERCIAL LASER CAN BE  
EASILY WEAPONIZED AND FIELDED AND COULD HAVE CAUSED THE  
REPORTED THOUSANDS OF IRANIAN EYE CASUALTIES.



THUS, THOUGH IT IS  
POSSIBLE THAT THE IRAQIS MAY HAVE DEVELOPED OR MODIFIED A  
LASER FOR USE AS A BLINDING WEAPON, THE  EVIDENCE  
AT THIS TIME PREVENTS US FROM PROJECTING THAT THE IRAQIS HAVE  
FIELDED A DEDICATED LASER BLINDING WEAPON.



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